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Board 5/24/02
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
POLLUTION REPORT

Date: May 22, 2002
Subject: Former Electro Finishers Site, Chicago, Cook County, Illinois
From: Charles Gebien, OSC
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BACKGROUND

POLREP: Initial, #1	State Notification: IEPA notified
Report Period: 5/7-9/02	NRC Incident Report# none
Response Authority: CERCLA	Start Date: 5/7/02
Site #: B5R4	Action Memorandum Status: Approved
NPL Status: non-NPL	CERCLIS ID#: ILD009437906

SITE DESCRIPTION

The Former Electro Finishers site is located at 1662-1668 West Fullerton Avenue, Chicago, Illinois (41° 55' 33.6" N latitude, 87° 40' 16.3" W longitude). Historical records provided by the City of Chicago Department of the Environment (CDE) document that the Former Electro Finishers (FEF) site was an active chromium plating shop for approximately 40 years, that ceased operations in 1990. Mr. Jim Petrozinni of Lincoln Park Property Management (LPPM) is the present owner of the property. The site is comprised of four brick buildings which are oriented in an east-west row facing south onto Fullerton Avenue and two small fenced yards. The site is located in a predominantly residential/commercial area and is bounded by Fullerton Avenue to the south, a residence to the west, a business to the east and an alley to the north.

On March 9, 2000, Pat Guzowski of the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) and Mark Retzlaff of the Illinois Environmental Protection Agency (Illinois EPA) responded to a complaint by John Zadrozy of 1704 West Fullerton concerning Green and yellow crystalline material that had been

forming in his basement and sump. Analytical results of sampling performed during this response indicated the presence of toxicity characteristic leaching procedure (TCLP) chromium at 302 milligrams /liter mg/l. Waste materials that contain TCLP chromium levels that are greater than 5 mg/l are considered hazardous wastes as defined in the Resource Conservation and Recovery Act (RCRA) regulations.

On May 5, 2000, in response to the Zadrozy Complaint, Pete Bataille of CDE and Pat Guzowski of MWRDGC inspected the site. An LPPM employee told CDE and MWRDGC that several vats or tanks had been left in the ground and concreted over. The CDE collected a grab sample of yellowish material from the floor and walls of the site building. Analytical results indicated a chromium level of 17,200 mg/l total chromium. The inspectors also noted yellow staining on the sidewalk in front of the site.

At the request of CDE and Illinois EPA, the United States Environmental Protection Agency's (U.S. EPA) On-Scene Coordinator (OSC) Rey Rivera, Claton Koher, Agency for Toxic Substances and Disease Registry (ATSDR) and members of the Superfund Assessment and Response Team (START) conducted an assessment of the site for a removal action on August 10, 2000. Eight samples were collected from surfaces within the site buildings and from soil and debris in the outdoor areas of the site. All eight samples were found to contain elevated levels of total chromium, ranging from 4,800 to 52,000 mg/l. Five samples contained elevated levels of hexavalent chromium, ranging from 2,200 to 37,000 mg/l. Four samples contained total lead greater than 1000 mg/l, the highest being 4,900 mg/l. Seven of the samples were analyzed for TCLP chromium, of which five contained greater than the 5 mg/l RCRA limit for a chromium characteristic hazardous waste (ranged from 120 to 2000 mg/l TCLP chromium). The assessment team was unable to obtain access to Mr. Zadrozy's home at 1704 W. Fullerton for sampling.

On January 25, 2001, the site assessment team revisited Mr. Zadrozy's home at 1704 W. Fullerton for sampling. Two water samples were collected from the basement sump and two wipe samples were collected from the basement walls. The two water samples contained total chromium at 13 mg/l. Several metals were detected in the wipe samples, most significantly chromium and hexavalent chromium (840 to 4,500 micrograms total chromium per square foot and 5.9 to 28 micrograms hexavalent chromium per square foot).

On March 13, 2001 U.S. EPA Sent a General Notice of Potential Liability and Request for Information to Mr. James Petrozinni regarding the site.

In a letter of April 25, 2001, the Illinois Department of Public

Health (IDPH) notified building occupants that based on U.S. EPA sampling at the site, persons inside the building may be exposed to elevated levels of chromium and lead.

On May 11, 2001, the IDPH completed a Health Consultation for the Former Electro Finishers site. The health consultation concludes that the site presents a public health hazard for persons who may be exposed to hexavalent chromium and lead in the dust and air inside the building and that the extent of contamination and potential for exposure at nearby residential properties needs to be characterized.

On November 26, 2001, U.S. EPA issued Unilateral Administrative Order Docket No. V-W-'02-C-667 (UAO) to Mr. Petrozzini requiring the him to conduct a removal action to address on-site and off-site contamination. On February 6, 2002, Lisa Kritt, Mr. Petrozzini's attorney, responded to the UAO by providing a letter of intent to comply with the UAO. The letter identified Scott Killip, Seneca Environmental Services (SES) as the project manager. On February 14, 2002, Larry Johnson, Assistant Regional Counsel, ORC, provided a written response to Lisa Kritt's letter which deemed February 6, 2002 as the effective date of the UAO and required that the site work plan be submitted to OSC Charles Gebien by February 20, 2002. On February 19, 2002, SES submitted a work plan to OSC Gebien. On March 14, 2002, OSC Gebien disapproved the work plan which did not address off-site contamination nor include an expeditious schedule for completion of the work. On March 22, 2002, SES submitted a revised work plan to OSC Gebien. On March 29, 2002, OSC Gebien conditionally approved the revised work plan requiring investigation of off-site contamination and prior approval of any subsurface remediation work performed at the site.

REMOVAL ACTIONS TAKEN

The following description of actions taken is copied from the "Status Report for FEF" dated May 17, 2002 prepared by Scott Killip, SES, and submitted to OSC Gebien:

May 7, 2002 - Mobilized to the FEF property and gained access to Zadrozny basement at 1704 West Fullerton Ave. Inspected Zadrozny basement area and took photographs of areas where yellow staining was evident. These areas included the lower three feet of the surface of a chimney located in the north/central area of the basement and the south wall of the basement. Stained mortar and yellow precipitate at these areas were removed with hand tools and vacuumed with a portable vacuum cleaner. The vacuum was equipped with a Gore Tex filter and a drywall (type) dust bag to eliminate

fugitive dust emissions. An application of 10% sodium bisulfate solution was applied to the affected areas and followed by a coat of basement sealer latex paint. Three additional applications of "Kills" were made on the areas after the sealer dried. Despite the application of the solution and heavy applications of paint, minor yellow staining was still apparent that appeared to leach through the paint, although friable particulates were absent. Cleanup activities were conducted in Building A and B at FEF, which consisted of removing yellow precipitate that was evident on the walls of both structures and in cracks observed in the floor in the southwest area of Building A (the reported location of plating dip tanks). Removal of the material was conducted with hand tools and a vacuum. Notable conditions during the effort were additional areas of precipitate encountered below layers of paint that had begun to peel. This was most evident on the north wall of Building A where precipitate was observed from the floor area to the ceiling level, approximately 20 feet from the floor. Also notable were the condition of the red brick construction materials that forms the structure walls. An inspection of the interior of a brick that was removed from the wall of Building A indicated that the pore area of the brick were saturated with a yellow material, presumably chromium waste. Materials removed from the wall areas were containerized in a 55-gallon drum and sealed.

May 8, 2002 - A fourth application of paint was made at the Zadrozny basement with similar results that were encountered on May 7. Four hand augers were attempted in Build B. Refusal was encountered at 1.5 to 3 feet in the borings and one sample was collected for analysis at 3 feet in boring B2. Two hand augers were attempted outside in the fenced area north of Building A. Refusal was encountered in both borings at 2.5 feet. A sample was collected in boring B5 at 2.5 feet. Additional areas of Building A and B underwent removal efforts similar to methods used on May 7. Concrete was applied to the area of Building A where yellow precipitate was observed in the cracks in the floor to encapsulate the cracks and prevent further precipitate from forming. Yellow precipitate was removed from the majority of areas where it was encountered in large volume and friable conditions. Areas where precipitate had flaked off the walls and collected on the floor were cleaned using hand tools followed with a vacuum. The materials were containerized in a 55-gallon drum. A heavy-duty plastic tarp was placed over a debris pile located in the aforementioned fenced area north of Building A. The tarp was weighted down with boards and rocks to keep it in place. This was completed per U.S. EPA approval to prevent offsite migration of debris material.

May 9, 2002 - Met with Mr. Petrozinni (FEF owner) and Mr. Charles

Gebien at the FEF site. Mr. Gebien observed the areas where removal activities had occurred in Buildings A and B and observed the fenced Area north of Building A. Mr. Gebien also observed the locations where hand augers were attempted. Conclusions from the meeting were that a more aggressive method of subsurface investigation should be conducted using a drill rig or geoprobe. Additionally, it was agreed that two offsite probes will be completed in the alley west of FEF

PLANNED REMOVAL ACTIONS

- Await notification from Scott Killip of re-mobe of assessment work with Geoprobe or drill rig.
- Oversee SES's progress in completing assessment work.

KEY ISSUES

None

ESTIMATED COSTS

	Cost	Ceiling
U.S. EPA	\$2,000*	\$32,450

*The estimated cost is based on estimated hours for OSC Gebien.